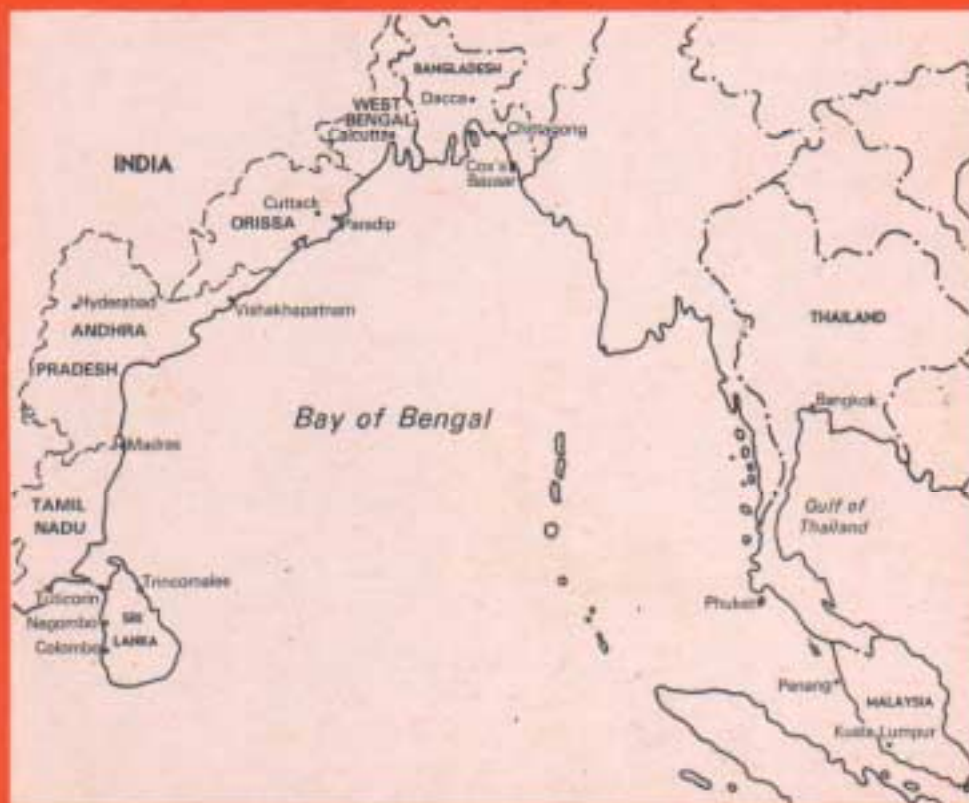


# Report of the Fourth Meeting of the Advisory Committee

Phuket, Thailand  
November 27-30, 1979



SWEDISH INTERNATIONAL DEVELOPMENT AUTHORITY



FOOD AND AGRICULTURE ORGANIZATION  
OF THE UNITED NATIONS

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Development of Small- Scale Fisheries

(GCP/RAS/040/SWE)

Report of the Fourth Meeting  
of the  
Advisory Committee

Phuket, Thailand  
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Funding Agency :

Swedish International  
Development Authority

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Food and Agriculture Organisation  
of the United Nations

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Development of Small-Scale Fisheries in the Bay of Bengal  
Madras, India, February 1980.

## PREFACE

This document is a report of the fourth meeting of the Advisory Committee of the programme "Development of Small- Scale Fisheries in the Bay of Bengal". It was hosted by the Government of Thailand, and held in Phuket, Thailand, from November 27 to 30, 1979.

The report records the deliberations and the conclusions of the meeting and was approved by the committee.

The document includes a summary of progress made in the first year of operation and outlines of future work. It therefore serves as a source of reference to officials of the countries concerned and might be of interest to other agencies and people engaged in small-scale fisheries development particularly in the Bay of Bengal area.

"Development of Small-> Scale Fisheries in the Bay of Bengal", GCP/RAS/040/SWE, is a regional FAO programme funded by the Swedish International Development Authority (SIDA) and executed by the Food and Agriculture Organization of the United Nations (FAO). Five countries are members -- Bangladesh, India, Malaysia, Sri Lanka and Thailand.

The Programme's Advisory Committee is composed of representatives of the five member-countries, FAO and SIDA. The committee meets once a year. Earlier meetings were held in Colombo (1976), Madras (1977), and Chittagong (1978).

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REPORT OF THE FOURTH MEETING OF THE ADVISORY COMMITTEE,

27-30 November, 1979, Phuket, Thailand

INTRODUCTION

1. The Meeting was convened at the Phuket Island Resort, Phuket. A list of the participants is attached as Appendix 1.
2. Dr. M. Y. Ali, Joint Secretary, Ministry of Fisheries and Livestock, Bangladesh, chairman of the 3rd Advisory Committee Meeting, called the meeting to order and requested Mr. Saneh Vadanathorn, Governor of Phuket Province, to address the meeting.
3. The Governor welcomed the delegates to Phuket. He stated that the fish resources of the Bay of Bengal were of great importance for the social and economic development of the country and wished the Bay of Bengal project all success in developing the small-scale fisheries of the region.
4. Mr. Ariya Sidthimunka, Deputy Director General, Department of Fisheries, Thailand, welcomed the delegates and other invitees at the inauguration of the 4th Advisory Committee Meeting. He stated that Thailand had supported the Bay of Bengal project from the very beginning and was happy to continue this collaboration. Development of small-scale fisheries is concerned not merely with the development of technology but also with the social and economic development of the fisherfolk by raising their productivity and incomes. In many coastal areas of Thailand, due to pressure on fish resources, alternative employment is becoming a prime need of the fisherfolk and coastal aquaculture is accorded high priority to cater to this situation. He conveyed his good wishes for a successful meeting.
5. Ms. E. Liljeberg, Senior Programme Officer, Agriculture Division, SIDA, Stockholm, conveyed the thanks of the Government of Sweden to the Government of Thailand for hosting the meeting and to the project and staff for their work in implementing the programme. In regard to the aquaculture project in Thailand, she was particularly happy to see that all sectors of the fishing community were involved in it. She concluded by wishing the Committee success in its deliberations.
6. Mr. N. Kojima, Director of Operations, Fisheries Department, FAO, thanked the Governor of Phuket for inaugurating the meeting, the Department of Fisheries, Thailand for hosting the meeting, the Government of India for hosting the Bay of Bengal project and the Government of Sweden for financing the project. In view of the vast area covered by the Bay of Bengal project, the extent of problems and the limited resources available, he suggested that the project's resources should not be spread too thinly over a large number of activities but should be focussed on selected activities. He emphasized that in small-scale fisheries development, the greatest efforts had to come from within the countries of the region, from individuals, associations and cooperatives and that the role of the project should primarily be a catalytic

one. Referring to the Indian Ocean Programme (IOP) which was being completed this year, he stated that it could eventually be replaced by decentralised management and development units, including a unit proposed for the Bay of Bengal area, which would be more responsive to the needs of the coastal states. He concluded by paying a tribute to the IOP, which had been associated in formulating the Bay of Bengal project, and its Programme Leader, Mr. H. Winsor, who had recently retired and to Ms. Liljeberg and Dr. A. Lindquist who had been continuously associated with the project from the formulation stage.

7. Following the proposal of Malaysia and seconded by Sri Lanka the Committee elected Mr, Umpol Pongsuwana, Director, Brackish Water Fisheries Division, Department of Fisheries, Thailand as chairman of the meeting.

8. The Chairman thanked the delegates for the honour bestowed on him in electing him chairman.

9. The agenda was approved as proposed and is attached as Appendix 2.

10. A drafting committee, with Dr. M. Y. Ali as chairman, was appointed to facilitate the preparation of the report of the meeting.

#### PROGRESS REPORT

11. The Project Manager in introducing this item expressed his pleasure at being able to report on work that had been actually carried out after three advisory committee meetings concerned with planning and preparation. The work had been implemented on the basis of the programme agreed on at the 3rd Advisory Committee Meeting.

12. He stated that excellent office facilities have been provided in Madras by the Government of India.

13. He then summarized the work that had been carried out in respect of the various project activities, set out in detail in the Progress Report in Appendix 3.

14. In response to a question from Thailand, the Project Manager explained that the activities which were not carried out due to technical reasons were the Motorization of Botali boats in Orissa due to lack of response by the State Government, the Cottage Industry for Net. Making which was not found to be promising as far as Sri Lanka was concerned, the Small Boat Purse Seining in Andhra Pradesh due to lack of evidence of fish resources which could be harvested by this method and the Stock Assessment Workshop which was not held in order to avoid overlap with an IOP consultation on the fishery resources of the Bay of Bengal which was also to have been held during the year.

#### Fishing Vessel Technology

15. Malaysia and Sri Lanka expressed interest in the activity for development of Reinforced Vulcanized Rubber boats in Sri Lanka, The Project Manager

explained that the prospects for success of this activity were so far not too promising. The delegates however urged that work on this activity should not be discontinued. Malaysia requested detailed information on the work so far done and reiterated a suggestion made at the 3rd Advisory Committee Meeting that the Malaysia Rubber Research Institute should be closely associated with this activity.

16. It was noted that Thailand had agreed to release a consultant in respect of the Motorization of Country Craft activity in Bangladesh in the spirit of TCDC and that the work would commence around mid-January, 1980.

17. India referred to the necessity to carry out experiments in materials for sheathing fishing boats, development of sailing capabilities of fishing craft, determination of the appropriate horsepower and the most suitable types of engines for small fishing boats. It was noted that while it might not be possible to come to any universally applicable conclusions in respect of the latter, a set of guidelines which could be used by governments to influence the appropriate powering of boats might be useful.

#### Fishing Gear and Methods

18. In regard to the Demersal Fishing Activity in Sri Lanka, Sri Lanka requested that, in view of the presence of large resources of demersal fish identified by the research vessel Dr. Fridtjof Nansen, the number of fishing boats and master-fishermen engaged in this activity should be increased.

#### Fish Utilization

19. In regard to the Floating Fish Receiving and Distribution Unit, it was noted that a pre-feasibility study carried out recently in Bangladesh was about to be finalized. The findings were that the type of unit envisaged was not economically viable due to its high cost, problems of maintenance and necessity for a carrier boat service between the unit and market and distribution centres.

20. In regard to the activity Fresh Fish Handling in Orissa, Thailand enquired whether the cost-benefit ratio of the Orissa fish boxes had been studied and whether it was feasible for the fishermen to invest in these boxes out of their own resources. It was noted that the boxes were being used for high-value Hilsa fish and that a cost-benefit analysis is included in the description of the project activity. India narrated her experience in preserving small pelagics in refrigerated sea water and overland transport using ice in insulated boxes. The operations were found to be economic as a higher price was realized for the fish thus handled,

#### Workshops/Training Courses

21. India expressed interest in learning about the experience of the marketing training course due to be conducted in Tamil Nadu in December with a view to repeating it in Andhra Pradesh where there was a marked need for such training.

22. In addition, India suggested that the project should undertake a study for the purpose of providing information as a basis for the establishment of a countrywide fish distribution network. Attention should also be paid to simple low-cost technological improvements for fish transport at the village level by women fish hawkers. The Project Manager pointed out that the former item was likely to fall outside the scope of the project. The latter however was more in line with the type of activity that could be undertaken and might be appropriately taken up in the Village Fish Receiving Unit activity.

### Coastal Aquaculture

23. India requested that brackishwater aquaculture activities undertaken by the project should be extended to India as well. India's main requirement was the training of technical personnel in countries where aquaculture techniques were well developed.

24. Sri Lanka thanked the Thailand aquaculture mission which carried out a survey of coastal aquaculture in 1978 and stressed the importance of developing coastal aquaculture in Sri Lanka through the project.

25. The Project Manager explained that the project had been originally designed as a marine fisheries project and that aquaculture activities had been incorporated to accommodate the requirements of Malaysia and Thailand.

26. FAO expressed the view that since brackishwater aquaculture was supplementary to marine fishing, project activities should be expanded in this important area, and referred to the possibility of arranging TCDC activities for utilising expertise and facilities from Philippines and Thailand, particularly for training.

27. A progress report on the Phang Nga project, Aquaculture Demonstration for Small Scale Fisheries Development, was given by Thailand. The socio-economic components of the activity which were being implemented side by side with the technical components were highlighted, as was the provision of welfare facilities and services, the recently formulated women component, and the participation of the villagers in the project from its inception.

28. FAO drew the attention of the meeting to the integrated nature of the project, particularly the feeling of people's participation and provincial government cooperation which could be expected to make the project one of abiding value. India expressed its considerable interest in various aspects of the project.

### Project Inputs

29. In response to a request by Thailand for a clarification of the role of the Women Officer, the Project Manager explained that the officer's role was to integrate women and families in fishing communities into as many activities as possible. While it is envisaged that there would be some limited activities solely involving women, there were a number of areas in small-scale fisheries in which women could increasingly participate along with the men.

30. The Project Manager brought to the notice of the meeting that there had been no response to the request made to the participating countries for the nomination of INSTA holders. Bangladesh stated that some nominations had been already submitted. Malaysia was so far unable to respond due to the shortage of officers with the required qualifications but expected to respond positively in the future. Thailand was considering staff for nomination, Sri Lanka welcomed the proposal and expressed its intention of submitting nominations by mid 1980.

31. In regard to delays in the clearance of consultants, India requested the committee to suggest ways and means of expediting clearance. Two possibilities were envisaged i. e. the submission of an en bloc, request well in advance or the obtaining of a blanket clearance to be applicable t.o short- term consultants.

32. India also suggested that practice of obtaining the services of national staff on deputation should be continued. National staff should be associated with project activities on a long-term basis as counterparts so that the participating countries could get lasting benefit from the activities,

33. Thailand requested a breakdown of the cost of the various project activities. The Project Manager stated that it had not been possible to prepare this breakdown for the meeting due to shortage of staff, lack of time and also the time lag in obtaining information since the accounts were being kept in Rome. The breakdown would be furnished as a supplement at a later date.

34. SIDA congratulated the project for the work done and the results so far achieved and stressed the importance of the catalytic effect of the programme. With this in view it is necessary to consider the manner in which the results should be disseminated, particularly outside the meeting of the Advisory Committee. One way of doing so could be to have a special technical day in conjunction with the Advisory Committee meeting at which the contents of the technical papers could be discussed.

35. The Project Manager stated that the project had followed the principle of not engaging in dissemination of technical aspects of activities until there were definite results available. As regards the suggestion for a technical day in conjunction with the Advisory Committee Meeting, which might be difficult to organise in view of the wide range of activities, he suggested that an alternative possibility might be for specialists from the region to be brought together to study an activity in which some definite results had been obtained.

36. SIDA drew the attention of the meeting to Tables 2-8 of the Progress Report which reflected the details of the achievements of the project and expressed the hope that as much progress would be achieved in the intervening period before the next Advisory Committee Meeting. SIDA also hoped that the project would be used for requests for information and assistance by the participating countries.

37. The consensus of the meeting, as expressed in particular by India, Thailand and Sri Lanka, was that commendable progress had been made by the project and that a substantial amount of work had been done in the short period since the project became operational. It was hoped that this rate of progress would continue during the coming year,

#### REVIEW OF SCOPE AND OBJECTIVES

38. The Chairman referred to the need for the Advisory Committee to guide the project in establishing a priority rating in respect of the various activity headings in the project document and requested it to consider the suggestions made in the document Review of Scope and Objectives- Appendix 4.

#### Fishing Vessel Technology

39. The meeting endorsed the suggestion that Fishing Vessel Technology should continue to receive a very high priority. Ideas put forward by the delegates for the attention of the project included: the development of a proto-type modernized traditional craft; a twin hull craft suitable for beaching and operation during the monsoons; continuation of the activity on Reinforced Vulcanized Rubber boats in Sri Lanka with a possibility of technical cooperation from Malaysia; and the processing and treatment of cheap timber to meet the shortage of good quality boat building timber,. Malaysia expressed interest in observing the construction of FRP boats in the various countries of the region.

#### Development of low-cost landing facilities

40. Thailand supported the suggestion by the project for a limitation on work under this item. India emphasized the need for experimenting with devices to facilitate the beach landing of fishing craft in view of the technical problems and high investment cost of providing fishery harbours.

#### Fishing Gear and Methods

41. A high priority rating for work under this item was endorsed, subject to due consideration being given to the availability of fish resources for exploitation by improved gear and methods particularly in respect of demersal resources. It is also essential that the innovations should not disrupt the way of life of the small-scale fishermen due to conflicts with their culture and traditions.

42. It was suggested that activities such as Two Boat Trawling in respect of which the target group consisted of commercial rather than artisanal fishermen should proceed with extreme care, even though such activities relate to the production objective of the project.

43. It was further suggested that activities should be implemented in areas where the fishermen are receptive to innovations and that attention should be paid to the possibilities of transfer of technology within the region,

Equipment Maintenance

44. The proposal to limit this work to related ongoing project activities was endorsed.

Village Fish Receiving and Distribution Unit

45. The proposal to accord high priority to this item was endorsed in view of its being an item of direct benefit to the fisherfolk. It was noted that work under this item would be rather different to that envisaged in the project document and would consist of simple facilities at the village level, which might however include items of appropriate technology such as windmill-driven ice plants or water pumps.

Floating Fish Receiving and Distribution Unit

46. Bangladesh requested that consideration be given to the suitability of using a mother vessel in this connection even though the prefeasibility mission had found that the original concept was not feasible. Thailand reiterated the interest shown in this activity at the 3rd Advisory Committee Meeting in view of its applicability to certain areas of Thailand where similar conditions exist.

Assistance with improved marketing

47. The consensus of the meeting was that in view of the complex nature of fish marketing, with problems varying from country to country, this item should appropriately be dealt with at the national level. Activities of this nature could not be undertaken by the project, with its limited resources. Some activities at the national level, such as the marketing course in Tamil Nadu, could however be undertaken in other places such as Institute of Fish Technology in Sri Lanka.

Product and Technology Development

48. The meeting agreed that, in place of the original proposal in the project document to outpost a Fish Technologist to the Institute of Fish Technology in Colombo, it was preferable to undertake field-oriented activities for devising low-cost technological innovations.

49. It was noted that there were many institutions in the region at which much work had been already done. Activities could be undertaken through sub contracts with these institutions in areas such as utilisation of low-value and unconventional fish species, use of trawl by-catch use as fish feed in aquaculture, preservation and processing, etc.

50. SIDA informed the meeting that the Nordic Council of Ministers had appointed a working group for investigating the possibilities for development of fish products in developing countries. The proposals of the working group would be of interest to the project.

### Workshops/Training Courses

51. Thailand expressed the view that, while workshops provided a good forum for exchange of views and transfer of technology between the member countries, they are not a suitable device for imparting training. Training workshops should be essentially conducted at the national level.

52. It was noted that village-level workshops are planned by the project for the purpose of consulting the fisherfolk in regard to the Kattumaram Improvement and Village Fish Receiving and Distribution Unit activities.

53. It was also suggested that a workshop on Reinforced Vulcanised Rubber boats might be held at an appropriate stage of the activity.

54. The meeting agreed that there was a strong need for an estimation of the optimum sustainable yield of fish resources in coastal areas where small-scale fisheries are being carried out. FAO suggested that this might be accomplished by comparative productivity and ecological studies combined with a review of existing local statistics to be carried out in the region.

55. Bangladesh felt that a training in stock assessment techniques and methodology was an urgent need and that a training activity should be initiated without delay.

### Extension Training Advisory Service

56. The meeting felt that the training of extension officers, including fishing technologists, was an area for national effort on a large scale rather than an activity to be undertaken by the project. It was more appropriate however, for the project to consider the training of trainers and in this connection, exchange of views and experience with SEAFDEC might be useful.

57. Malaysia expressed interest in utilizing the expertise in aquaculture available in Thailand in its programme for the training of aquaculture extension workers and operatives.

### Information Service

58. It was decided that the discussion of this item be undertaken under Agenda item 4 (Work Programme).

### Development of Coastal Aquaculture

59. The consensus of the Committee was that high priority should be given to coastal aquaculture. Of the countries which had not earlier given a priority rating to coastal aquaculture, India gave it a very high priority rating, as did Sri Lanka. In the case of India, it was stated that the main requirements were training for officers, particularly in other countries of the region, and short term expertise for project formulation and implementation.

60. In view of the high priority rating now given to this sphere of activity, the Project Manager suggested that savings accruing from the deletion of some items be allocated for coastal aquaculture. In this connection, India pointed out the availability of unutilized funds in the areas of fellowships and training.

61. The SIDA representatives pointed out that a change in priorities could be critical in view of the limitations on funds and the fact that it was desirable to reserve some savings for the future.

62. FAO suggested that the funding possibilities from other projects and programmes - national, regional, and global - be explored before a decision is made by the project to accord the proposed high priority to coastal aquaculture.

#### Integration of women

63. The Project Manager, in introducing the item, emphasized again that the major project inputs in this area would be concentrated on assuring increased integration of women into the overall development process, with marginal inputs into activities designed specifically for women's participation only.

64. The meeting strongly endorsed the planned scope of the project's activities in this area, and noted that although women already played an important part in many activities within the framework of small-scale fisheries, particularly in aquaculture, increased integration of women into the development process was most desirable. This should take place without undue infringement on existing social and community structures, and without estranging women from their essential role as mothers.

65. All delegations agreed that increasing the effectiveness of women participation was particularly desirable in the framework of aquaculture development while India noted that women were already engaged in activities like marketing, fish curing and net making. In all these activities technological improvements were necessary.

#### WORK PROGRAMME

66. As noted by the Project Manager, considerable discussion on the orientation to be given to the work programme had already taken place during the debate on Scope and Objectives. Following from that debate, it was clear that some re-orientation in the work programme (Appendix 5) was required. Work on the development of suitable technology for application to the construction of RVR boats would have to be continued, and additional inputs into the investigation of alternative boat building materials were indicated. Even if the concept of floating fish receiving units should prove to be unfeasible, the project was required to continue investigation of alternative support possibilities to traditional fishing fleets, such as in the form of mothership operations. As far as project resources allowed, additional inputs into aquaculture development in India and Sri Lanka would have to be planned and implemented. The project's plan for the conduct of workshops and technical consultations would be rearranged in line with discussions of the previous item.

67. India, Malaysia and Bangladesh stressed their priority interest in further aquaculture work, Malaysia stated that the Ban Merbok project which had been already identified is now ready for implementation.

68. India, supported by Sri Lanka and Thailand, reiterated its interest in project assistance in the field of fishing vessel technology in general, energy conservation measures in fishing operations and in shore-based activities (including the development of wind and solar energy power plant units), and alternative fishing operations patterns (e.g. mothership and fleet operations),

69. Investigations into alternative boat building materials were of considerable interest to all delegations, and should include such materials as rubber, FRP, aluminium, ferro-cement, as well as up-grading techniques for lower grade timber.

70. On the subject of an effective information base, the meeting endorsed the project's plans to devote increasing effort to the implementation of such a base, as well as to an effective information dissemination system. Several delegations warned against an overly ambitious programme and emphasized the need to attempt at maximum use of information centres and systems already in being, while stressing the desirability of establishing a continuous information flow from the project to participating countries.

71. It was noted that the channeling of this information flow to the ultimate beneficiary, the fishermen and their families, was an important function of the extension services at national level.,

#### TRIPARTITE REVIEW RAS/77/044

72. During a session recess, a Tripartite Review of the FAO/UNDP Project Small-Scale Fisheries Promotion in South Asia, RAS/77/044, was conducted. The review was attended by the delegates from Bangladesh, India, Sri Lanka and Thailand and the representatives of FAO and UNDP.

73" In connection with the proposal to decentralize the Indian Ocean Programme into three regional management and development units, in terms of the FAO EEZ programme, it was proposed that the scope of RAS/77/044 should be expanded to cover the functions of this regional unit for the Bay of Bengal area and extended by several months until the end of 1981 in the first instance.

74. While some of the countries had not had an opportunity to officially review the draft proposal, Thailand strongly supported the proposal. India, Bangladesh and Sri Lanka also expressed support. India, however, felt that it had to be examined at the national level.

75. It was agreed that a revision of the project document would be drafted accordingly by FAO and submitted to UNDP for consideration.

## GOVERNMENT INPUT AND TCDC

76. While the project had experienced no difficulties with national liaison officers, the Project Manager remarked that problems had been experienced with regard to the continued assignment of technical counterparts to individual activities, particularly in the field of fishing gear and methods. He emphasized the importance of such national support personnel for sustained benefit of project activities and felt that in the future, activity implementation might have to be made conditional on such personnel being effectively assigned.

77. All delegations took note of these remarks, and emphasized that any shortcomings noted so far were mainly due to the chronic lack of qualified manpower in their co-operating services. It was stressed that there was hope for a substantial improvement of Government inputs in this sector in the future.

78. India and Bangladesh suggested that all participating countries should endeavour to assign technical counterparts to the project in the subject matter fields of particular importance to them. The meeting unanimously endorsed this suggestion and recommended its implementation as a high priority for Government action,

79. A lively discussion took place on the subject of increased TCDC within the framework of the project's fields of interest. All delegations strongly endorsed the concept and their willingness to increasingly participate in its implementation.

80. Specific fields of interest in this context ranged from training of aquaculture specialists and exchange of available technological know-how in various boat construction techniques and materials, to the offer by India to accommodate trainees from participating countries in her well established training institutes, particularly the CIFE (Central Institute of Fisheries Education in Bombay) and the CIFNET (Central Institute of Fisheries Nautical and Engineering Training in Cochin and Madras),

81. It was agreed that the problem in increasing the cross-flow of expertise and technical know-how available was not the concept of TCDC but rather the absence of a procedure to implement it,

82. The Project Manager suggested that the project could help stimulate TCDC by preparing a document outlining the give-and-take possibilities of the participating countries in subjects covered by the Bay of Bengal Project. It could later convene a high-level consultation among participating countries on areas of priority in TCDC and procedures of implementation" The meeting accepted the suggestion.

83. The meeting proceeded to discuss the continuing problem regarding the clearance of short-term consultants for specific project activities. While it was noted that national procedures in this regard differed considerably, the efforts made by all countries to expedite such clearances were much appreciated.

84. Bangladesh indicated that In the case of short term consultants, there should be no difficulty or undue delay as clearance could be given at the level of Ministry of Fisheries and Livestock, while India indicated that there should be no delay in clearing short-term consultancies of upto one month's duration. Malaysia and Thailand did not foresee any difficulties in giving expeditious clearance for short-term consultants. Sri Lanka acknowledged the need for rapid clearance of consultants, although in all cases requests for clearance would have to be channelled through the External Resources Division,

85. FAO would henceforth be guided by these procedures in submitting proposals for clearance, and it was tacitly agreed that consultants who had received clearance in the preceding 12 months would not have to be resubmitted for clearance if their services were again required.

#### OTHER MATTERS

##### Interaction with other FAO projects

86. FAO's proposals regarding the envisaged change in the form of regional assistance in fisheries development and management as a consequence of the adoption of its EEZ programme had been discussed earlier in the Tripartite Review of the project Small Scale Fisheries Promotion in South Asia, RAS/77/044.

87. Participating countries were assured of the continuing interest of the Aquaculture Development and Coordination Programme and of the Regional Aquaculture Project for Asia in all matters relating to aquaculture development in the project area; project activities in aquaculture would continue to be coordinated with these programmes.

88. The effective collaboration with the South China Sea Programme, established in regard to project activities in Thailand and Malaysia, was noted.

89. Ongoing national projects in the fisheries sector would continue to coordinate their relevant activities with the Bay of Bengal project and cooperation would be encouraged wherever applicable.

##### Composition and Terms of Reference of the Advisory Committee

90. Due to the phasing out of the Indian Ocean Programme, a rewording of the Advisory Committee's Terms of Reference became necessary. The meeting considered a draft submitted by FAO and endorsed it unanimously. The revised Terms of Reference are attached as Appendix 6. It was agreed that the Project would henceforth be referred to as a Programme.

##### Mid-term Review

91. The meeting considered a proposal on the mid-term review mission, as required in accordance with the provisions of the plan of operation, and agreed that :

- (a) The Terms of Reference would be to
- Evaluate project inputs against planned targets;
  - Assess and evaluate project performance against stated objectives and priorities set;
  - Review and evaluate Government Cooperating Agencies' inputs and support;
  - Review Government policies relating to small- scale fisheries development with particular reference to follow-up action on project activity results;
  - Prepare recommendations for project orientation and level of inputs during the second and subsequent phases of project operation (i. e. years 4 and 5, and further project extension if appropriate) ;
  - Report in detail on its findings.
- (b) The composition of the mid-term review mission would be as follows :
- One independent member selected by FAO in consultation with participating countries.
  - One member representing FAO.
  - One member representing SIDA.
  - Representatives of participating countries should be associated with the work of the mission in their respective countries.
- (c) The tentative time-table would be as follows :
- |                                  |   |
|----------------------------------|---|
| 5th Advisory Committee Meeting   | - late October/early November 1980          |
| Mid term Review Mission (travel) | 3 - 4 weeks in November                     |
| Preparation of Mission Report    | - 2 weeks late November/<br>early December. |

Next Meeting

92. The delegate of Malaysia extended his Government's invitation to the Committee to hold its fifth meeting in Malaysia,

93. On behalf of the Committee members, the Chairman was pleased to accept the invitation of Malaysia and warmly thanked the Government of Malaysia for its readiness to host the 5th Advisory Committee Meeting.

94. The above report was adopted by the meeting.

At the concluding session, following the adoption of the report of the meeting, the delegates of India, Bangladesh, Malaysia and Sri Lanka, on behalf of the participating countries, thanked the host government for the excellent arrangements and hospitality and expressed their appreciation of the conduct of the meeting by the chairman, the financial support and keen interest of SIDA, the role of FAO as the executing agency, and the work done by the project during the year. On behalf of FAO, Mr. N. Kojima expressed his appreciation of the positive discussion that had taken place on several substantive issues, particularly in regard to determination of priorities for the purpose of focussing the work of the project. On behalf of SIDA, Dr. A. Lindquist expressed his satisfaction with the project's progress, the keen interest shown by the implementing agency and the manner in which the project staff had discharged their responsibilities.

DEVELOPMENT OF SMALL-SCALE FISHERIES IN THE BAY OF BENGAL GCP/RAS/040/SWE

4th Advisory Committee Meeting, 27 - 30 November 1979, Phuket, Thailand

LIST OF PARTICIPANTS

AC4/3 Rev. 1

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DEVELOPMENT OF SMALL SCALE FISHERIES IN THE BAY OF BENGAL GCP/RAS/040/SWE

4th Advisory Committee Meeting, 27-30 November 1979, Phuket, Thailand

ANNOTATED AGENDA (Provisional)

AC4/4

1. Introduction : (Tue. 27/11 at 0900)

- 1.1 Opening of the meeting
- 1.2 Election of Chairman
- 1.3 Adoption of the agenda

2. Proress Report :

The Progress Report (document AC4/6) gives an account of project implementation since the 3rd Advisory Committee Meeting (November 1978). The basis for implementation has been the work programme proposed to the 3rd meeting adjusted in accordance with the recommendations of that meeting. The programme has been followed closely, but there have been inevitable deviations for reasons of delays in recruit, ment of staff and consultants and also delays in response from cooperating agencies. The Committee is invited to comment on the performance of the project as a whole and on the progress of specific activities or types of activities.

3. Scope and Objectives : (Wed, 28/11 at 0830)

The first year of operation has proved that the scope and objectives of the project are indeed very relevant to small scale fisheries development in the region. However, considering the very wide scope and the extent of the geographical area involved, a more definite focus on priority needs will enable the participating countries to make the best use of the project and its services. This consideration is further developed in a "Review of Scope and Objectives" (document AC4/7). In considering the orientation of the project, not only the priorities of the Governments should be taken into account but also the project's design and total capacity as well as similar work undertaken by other agencies.

4. Work Programme :

On the basis of the progress of ongoing activities, and discussions with cooperating agencies, a draft programme has been prepared (document AC4/8). As in the previous year, this is an attempt to identify suitable activities in a time/space/financial frame. The detailed plan is subject to the recommendations of this meeting and subsequent discussions with the cooperating agencies concerned,

5. Government Input and TCDC (Wed. 28/11 at 1400)

The system of National Liaison Officers for the project as a whole is functioning well. At the technical level however, there have been several instances where the assignment of Technical Liaison Officers has been either delayed or overlooked. The shortage of staff experienced by some of the cooperating agencies is appreciated but for some of the activities a national participation is necessary not only for carrying out the activity itself but also to ensure that sustained benefit is derived from it. In such cases, implementation may have to be made conditional on the assignment of a Technical Liaison Officer. The Committee's views are sought in this regard.

The project is whenever possible making efforts to utilise in the first instance capacity and expertise available in the region; this approach promotes technical cooperation between the participating countries. It is, however, evident that there is much greater scope for such cooperation ranging from exchange of experience to development work to commercially oriented ventures. With a view to using the project as a vehicle for bringing about such cooperation, specific ideas are solicited from the participating countries in regard to what they need and what they are in a position to offer.

6. Other Matters

6.1 Interaction with other FAO projects

The Committee may wish to comment on the project's interaction with other FAO-executed projects such as the South China Sea Programme, Small-Scale Fisheries Promotion in South Asia, and in particular the new proposal for a UNDP-funded project for the Bay of Bengal area.

6.2 Composition and Terms of Reference

The division of the Indian Ocean Programme into programmes covering smaller geographical areas calls for slight modifications of the Composition and Terms of Reference of the Committee. A revised draft is given in document AC4/9.

6.3 Mid- term review

The Plan of Operation (para 20) stipulates that "on completion of the second year of operations a review shall be conducted jointly by the participating Governments, FAO and the Donor, to assess progress achieved". The timing and composition of the review team may be discussed.

6.4 Next Meeting

The Advisory Committee should meet at least once a year, The timing of the next meeting may be determined with due consideration to the timing of the mid-term review,

7. Adoption of report : (Fri. 30/11 at 0900)

DEVELOPMENT OF SMALL-SCALE FISHERIES IN THE BAY OF BENGAL  
GCP/RAS/040/SWE

4th Advisory Committee Meeting, 27 - 30 November 1979, Phuket, Thailand

PROGRESS REPORT - 1979

AC 4/6

The project moved into its headquarters in Madras 1 April 1979 and is, at the end of the reporting period, nearly fully operational.

Project activities have been implemented on the basis of the Report of the Third Meeting of the Advisory Committee. Although the first year was envisaged mainly as a phase of planning of activities, it has been possible to go further and commence implementation in several cases. Three workshops/consultations, the follow up from which will carry over to the future work programme, have been completed. Good progress has been made in respect of several activities concerning Fishing Vessel Technology and Fishing Gear and Methods in Bangladesh, India and Sri Lanka, a Fresh Fish Handling activity in India and an Aquaculture Demonstration activity in Thailand.

No serious problems in implementation have been encountered, but streamlining of procedures, particularly in recruitment of consultants and better response in allocation of counterpart personnel, is desirable. The response in respect of INSTA Fellowships is disappointing.

The experience with national staff on deputation has been positive, as also of cooperation agreements with national institutes/organisations in respect of project implementation.

A. ACCOUNT OF PROJECT ACTIVITIES

General

1. The project became operational in November 1978 at the time of the appointment of the Project Manager. Host Government clearance for the first project staff was received in January 1979. Preparations for the establishment of project headquarters in Madras were then started and concluded in March. The project with its international staff was thus transferred from Colombo to Madras with an effective date of April 1, 1979.
2. The Host Government is providing excellent office accommodation; all facilities, services, etc, are just about being completed at the end of the reporting period.
3. The size of the project and the complexity of its operations require an elaborate administrative system for effective implementation. All matters related to this have been satisfactorily resolved and include the establishment of project offices in Bangladesh and Sri Lanka,
4. In general accordance with the scope and objectives of the project, as given in the project document, the basis for implementation of project activities has been the Report of the Third Meeting of the Advisory Committee. It has been followed as closely as possible but certain adjustments have had to be made because of delays in the recruitment of staff and consultants and in the response from cooperating agencies. In a few instances, activities have not been pursued for technical reasons,
5. The work programme endorsed in the 3rd meeting envisaged the first year of operation to be mainly a phase of planning of activities. Several activities however have progressed further and are under implementation at the end of the reporting period.
6. An account of the progress of each activity under the different subject matter headings is given below. Details of the inputs provided are given in Section B below and in tables 1 - 8.

Fishing Vessel Technology

7. Reinforced Vulcanized Rubber (RVR) Boats (SRL/RVR) : The purpose is to investigate the technical and economic feasibility of small craft of RVR construction,
8. Boats of RVR construction with steel mesh as reinforcement, built in Sri Lanka some years ago, have been inspected and the technique analysed. Water penetration has caused heavy corrosion of the steel mesh. Problems of fatigue in this type of reinforcement are

also feared due to the high flexibility of the RVR/Steel panels.

9. Alternative lines of action are being investigated - viz, the use of pre-fabricated vulcanized rubber sheets reinforced with fabrics, and the sheathing of wooden boats with vulcanized rubber. Rubber specialists are, on behalf of the project, carrying out tests and investigating technical details such as tensile strength, methods of gluing seams and butts and adhesion efficiencies.

10. The problems of using RVR for small boat construction do not appear to be easily overcome. A review of the findings and optional avenues to proceed along will be undertaken early December. This review will determine whether and how the activity will be continued.

11. Inboard motorization of small FRP boats (SRL/IBM): The purpose is to demonstrate the use of small light-weight fuel-saving diesel engines in FRP boats in Sri Lanka.

12. One 18-foot FRP hull has been purchased from the CEY-NOR Development Foundation, while another 13-foot boat of wood/plywood construction has been designed and is under construction by the same organisation. Three 6 hp engines have been provided on a grant basis by the ODA of the UK. The engine in the 18-footer has been installed and technical trials were undertaken in May. Certain modifications to the installation had to be made and a 2:1 reduction gear box supplemented.

13. The 18-footer is ready for trials and the 23-footer is expected to be ready by late November. A feature of the latter is that it is also designed for carrying sails. On completion of technical trials, the boats will be commercially tested in fishing operations. The Cey-Nor Development Foundation is undertaking all construction and testing work on behalf of the project.

14. Beach Craft Development (SRL/BCD) : The purpose is to develop a suitable low cost craft to be operated by small-scale fishermen in Sri Lanka.

15. A sailing craft with twin hulls joined by a large platform of bamboo has been constructed and tested. The hulls are made of FRP but could also, for instance, be made of marine plywood.

16. The sailing performance of the craft during trials in April was not upto expectations. The rig has therefore been modified and new sails procured. Further trials will take place in late November.

17. Kattumaram Improvement (IND/KAT) : The objective of this activity is to investigate the possibilities of increasing the productivity and profitability of Kattumaram fishing.

18. A description of the activity has been prepared which identifies the prospects of improvement of Kattumarams and outlines a series of sub activities to be undertaken over a two year period. The work to be done includes reduction of investment and increase of service life, fishing trials and demonstrations with existing types of Kattumarams, provision and trials of unconventional Kattumarams and development of alternative craft. The description is documented with reference IND/KAT/1.

19. The identification of possibilities of using alternative sources of timber, chemical preservation treatment of logs and physical protection of logs has been completed and is reported on in a draft working paper. A detailed survey of the Kattumarams and their operations in the states of Andhra Pradesh and Tamilnadu has been completed and the report is under preparation.

20. The next step is to procure logs to make physical trials of the recommendations for chemical preservation and sheathing of logs. The design and construction of unconventional Kattumarams will also start soon. Contact will be established with a fishing community in the vicinity of Madras in order to obtain their participation in the planning and development work of this sub activity.

21. Beach Craft Development (IND/BCD) : This activity aims at developing a suitable craft which can be operated from open beaches under moderate to heavy surf conditions.

22. An outline of work to be done has been prepared; it includes a review of previous efforts to develop beach landing craft, the design, construction and trials of prototype boats; and experiments with different materials to be used for floatation purposes. The review has been completed and a report is under preparation. Two prototype boats have been designed and contacts have been made with boatyards in Kakinada and Visakhapatnam for the actual construction.

23. It is expected that construction can start in November and possibly be completed before the end of the year. Initial trials will concentrate on surf and landing operations, on successful completion of which commercial fishing trials will take place.

24. Boat Building Materials (BOB/BBM) : This is a study on the availability and cost of traditional boat building materials in relation to novel materials such as FRP and ferrocement.

25. The terms of reference of the study have been prepared and submitted to potential consultants in India. The initial study will be limited to the east coast of India and will apply to traditional boats like Kattumarams and plank built boats upto a maximum size of about 30 ft. The study will probably commence late 1979. It is intended to repeat the study for the conditions in Sri Lanka and Bangladesh.

c. Fishing Gear and Methods

27. Fishing Gear Improvement (SRL/FGI) : The purpose is to upgrade the drift gillnet fishery for large pelagic species by demonstrating the use of more appropriate netting and framing material to bring about improved catching efficiency at a reduced investment cost.

28. Trials were initiated in early March by providing fishermen in two areas with polypropylene rope for framing and netting made of thinner PA yarn of different sizes for comparative testing with their existing gear. Comparison of catches has shown that the finer netting material has a higher catching efficiency and there is no evidence of excessive wear and tear of the finer netting. The use of polypropylene rope for framing line has been found to be most appropriate and readily accepted by fishermen,

29. The tests will continue for some more time and the findings will thereafter be disseminated to fishermen and to importers and manufacturers of fishing gear.

30. Fishing Gear Improvement (BGD/FGI) : The purpose is to improve the most important traditional fishing gears such as the large mesh drift gillnet and the set-bag net (Behundi) by reducing capital and maintenance costs while maintaining or augmenting the catching efficiency of these gears.

31. The fishing experiment for improvement of the large mesh drift gillnet commenced in early November in cooperation with CARITAS, Bangladesh. Preparations are in progress for the experiments for improvement of the set-bag nets due to commence in December.

32. Demersal Fishing (SRL/DEF) : The purpose is to develop and demonstrate demersal fishing gear and methods other than trawling - viz. bottom set longlines, vertical handlines, bottom set gillnets, and fish traps for harvesting lightly exploited resources, diversifying the fishery, and increasing the productivity of local fishing craft.

33. The fishing experiment for improvement and extension of the existing bottom set longlining and vertical handlining is being carried out since early October in cooperation with a private boat owner

under the supervision of a consultant masterfisherman. Experiments with bottom set gillnets and fish traps are to take place in a second phase after mobilization of further counterpart inputs.

34. Cottage Industry for Net Making (BOB/CIN) : The purpose is to make an evaluation of the feasibility of manual production of fishing nets and to explore the possibility of up grading quality and productivity by the use of hand operated braiding machines and other tools.

35. A preliminary study was carried out in Sri Lanka which indicated that low productivity manual production is not competitive in a context in which machine made nets are permitted to be freely produced and imported, The attempt to locate an effective hand operated net braiding machine has not yet been successful.

36. The activity will continue as a component of women oriented project activities in areas where hand-making of nets is still of socio-economic importance, coupled with attempts to identify/develop a hand operated machine in collaboration with an institute/organisation concerned with development of intermediate technology.

37. Two Boat Trawling (IND/TBT) : The purpose is to evaluate the economic feasibility of diversion of fishing effort from shrimps to fish in the inshore trawl fishery in Palk Bay and Gulf of Mannar.

36. The preparation of this activity is nearly completed and is expected to commence in February. It will be implemented through a cooperation agreement with the Tamilnadu Fisheries Development Corporation, which will provide fishing boats. The boats will be operated under the guidance of a consultant masterfisherman.

39. Fishing Method Diversification (BGD/FMD) : The purpose is to identify suitable fishing methods for establishing a profitable diversified fishing operation based in Khulna District, Bangladesh.

40. The activity was to be started already in January 1979 but had to be called off because of a fishermen's strike in Bangladesh. It was reactivated early November under the direction of a consultant masterfisherman and is being implemented through a cooperation agreement with the Bangladesh Fisheries Development Corporation (BFDC), with the use of two small fishing boats and a support vessel.

The activity will, in the first phase, continue till the end of the winter season

41. Ad hoc Services : Two alternative modifications were suggested to improve the performance of a net/line hauler, used on board 38 ft FRP drift netters in Sri Lanka, which was not functioning effectively. The modifications were demonstrated on two boats and detailed drawings were distributed to the owners/operators of all boats in which this hauler is installed.

42. Demonstration of the use of a small light signal buoy to counter the hazard of ships running over and cutting the drift nets laid out at sea was carried out in collaboration with a traditional fisherman in Sri Lanka. The initial response by fishermen has been positive. The demonstration is being continued, and if acceptability is confirmed, ways and means of supply and/or local manufacture will be explored.

#### Fish Utilization

43. Village Fish Receiving and Distribution Units (IND/VFU) : The purpose is to provide, in a suitable village, simple facilities to help in improving the quality standard of fish by better handling, storage, preservation and distribution.

44. Surveys have been undertaken for selection of a suitable site and the tentative choice is Poonakayal in Tirunelveli District, Tamilnadu. The next step is to prepare a description of the contents of the activity.

45. Fish Receiving and Distribution Unit (BGD/FFUj) : The purpose of the activity is to experiment with a suitable floating 'landing centre' in the estuarine waters in Bangladesh. A prefeasibility study is being undertaken in Bangladesh at the end of the reporting period. The recommendations of this mission will determine future action.

46. Fish Drying Technology (IND/FDT): The activity aims at improving the fish drying techniques and storage practices prevailing in traditional fishing communities with a view to increasing the returns from the product.

47. A suitable location for experimentation and demonstration of improved techniques has been selected in the state of Andhra Pradesh. The next step is to prepare a detailed project description outlining the contents of the activity.

48. Fresh Fish Handling (IND/FFH) : The purpose is to demonstrate the use of ice for fish preservation in insulated fish boxes on board fishing boats employed in hilsa fishing,

49. The activity is in progress in the Balasore district of Orissa. Insulated boxes have been designed and fabricated, and issued to

fishermen free of charge; ice is also being provided. A fishermen's cooperative society is responsible for implementation of the trials with assistance from the Directorate of Fisheries. The cooperative is supplying the project with information regarding quantities of fish landed and comparative prices for fish carried in the boxes and fish landed in the traditional way by boats without ice.

50. A review of the activity will be undertaken in April, at the end of the fishing season, and further action will be subject to the result of this review.

#### Workshops/Training Courses

51. Workshops on Social Feasibility in Small-Scale Fisheries Development (BOB/SOF) : The purpose of the workshop was to highlight and consider the concept of social feasibility and to identify the social factors which should be taken into account in the formulation and implementation of small scale fisheries development projects and programmes.

52. Representatives and/or contributors of experience papers from all the participating countries attended the workshop which was held at Madras in September. Its outcome was a better understanding of the concept of social feasibility and a checklist of the social aspects and factors that should be taken into consideration in project planning and implementation.

53. The project will make use of this outcome in its future work. Specifically the Village Fish Receiving unit will be treated as a pilot project for this purpose and the checklist developed at the workshop will be used in the preparation of the activity and its implementation.

54. Workshop on Stock Assessment (BOB/STA) : The purpose is to determine the requirements, with particular reference to training and technical expertise in methodology, for a practical programme of stock assessment in the coastal fisheries of the participating countries.

55. The workshop was originally scheduled for November 1979, but planning was suspended to avoid overlap with and to obtain possible input from, an IOP Technical Consultation on Fishery Resources of the Bay of Bengal scheduled for July, which however did not ultimately materialise. The workshop has been rescheduled for June 1980 to be held in Dacca, and planning is in progress with the assistance of a consultant.

56. Training Course for Fish Marketing Personnel (IND/MAR): The purpose is to give training, particularly in management and accounting, to officers of public sector organisations in Tamil Nadu concerned with fish marketing.

57. The course will be conducted at Madras in December by project staff and consultants and, if the experience is positive, it may serve as a model to be repeated elsewhere.

Extension Training Advisory Service

58. Meeting on Training of Women Extension Workers (BOB/TWE) : The purpose of the meeting was to indicate guidelines and outline proposals for extension among the women in fishing communities and to identify possibilities of development activities for their involvement and benefits.

59. All the participating countries were represented in the meeting which was held at Madras in April. The information available on the status of women in the small-scale fisheries was presented and their techno-economic role and the socio-economic conditions of fishing families were discussed. Several project ideas for extension activities and other development activities related to women's involvement and benefit were outlined by the participants.

60. A women component is being incorporated in the Aquaculture Demonstration project in Thailand, based on one of the project ideas. Other relevant ideas will be developed for incorporation in planned or on-going project activities or to be undertaken as specific activities in cooperation with fisheries administrations.

61. Workshop on Extension Service Requirements (BOB/ESR) : The purpose of the workshop was to make a critical evaluation of existing extension services and to identify the requirements for their improvement and of assistance to strengthen and support extension programmes in the participating countries.

62. Four of the five participating countries were represented in the workshop which was held in Colombo in October. The workshop led to an appreciation of the common problems and deficiencies of the extension services in most of the participating countries and of the varied approaches possible for making them an effective instrument for small scale fisheries development. Several project ideas were outlined for interaction with the Bay of Bengal project in the improvement of extension services.

63. Some of the proposals will be developed for incorporation in the work programme of the Extension Advisory Service.

Establishment of Information Base :

64. The work on design and implementation of an effective system of information transfer and dissemination has only started at the very end of the reporting period. This matter will therefore be dealt with under the work programme for the future.

Coastal Aquaculture

65. Aquaculture Demonstration for Small-Scale Fisheries Development, Phang Nga, Thailand (TBA/ACD) : The purpose is to provide the basis for increasing incomes and improving living standards at the village level through an integrated pilot scale project.

66. Practical demonstrations of known aquafarming techniques in the culture of fin fish, cockles, mussels and oysters are being carried out in several small villages located in Phang Nga Bay with active involvement of groups of villagers in the construction, servicing and management of the aquafarming units. This is supplemented by self-help programmes organised to provide facilities for improving living standards e. g. construction of a reservoir tank for fresh water. A bench-mark socio-economic survey of the villages has been carried out to obtain data against which progress can be measured. Two short training courses in aquafarming have been conducted for fisheries officers and members of village groups. Other activities such as the provision of work-boats for servicing the aquafarming units and the provision of a service boat for supplying fresh water to the villages are in process.

67. A women component for providing training and demonstration to women groups in handicrafts, processing and aquafarming is being added to the project. The project is a continuing one, with a duration of 2½ years, in which the South China Sea Programme (SCSP), on behalf of the Bay of Bengal project, collaborates in implementation with the Department of Fisheries and the Provincial Government.

68. Aquaculture Demonstration for Small-Scale Fisheries Development, Ban Merbok, Malaysia (MAL/CAC) : The purpose is to provide the basis for increasing incomes and improving living standards at the village level through a pilot scale brackish water aquaculture project.

69. A feasibility study in the proposed site - a mangrove swamp bordering the Merbok estuary in Kedah state - has been completed by an inter-departmental task force. Consultant input for the study in the form of short term services by an aquaculture engineer and a

fishery biologist was funded by the Bay of Bengal project. Funding was also provided for a study tour in Indonesia for two members of the task force as well as for a fellowship for an officer to study freshwater prawn farming in Hawaii,

70. The project is due for implementation during a period of 2½ years starting January 1980. SCSP on behalf of the Bay of Bengal project will collaborate in implementation with the Department of Fisheries.

71. Coastal Aquaculture, Bangladesh (BGD/CAC) : The purpose is to establish a pilot project for demonstration of known techniques of shrimp culture.

72. A consultant mission is presently in Bangladesh to identify a suitable site and assess the requirements for establishment and operation. Planning of the activity will be undertaken on the basis of the report of the mission.

#### Other activities

73. Management and supporting services have been provided to the FAO/UNDP project Small-Scale Fisheries Promotion in South Asia, RAS/77/044. For details, reference is made to the Project Progress Report: January - October, 1979.

74. The Project Manager participated in the meeting of the IOFC Executive Committee for Implementation of the Indian Ocean Programme in Rome in April. He also participated in a Symposium on Applied Operations Research in Fishing in Trondheim, Norway, and functioned as Chairman in one of the sessions. The Development Adviser is participating in December in the meeting of the XPFC Standing Committee on Resource Research and Development.

75. Project staff have frequently participated in ad hoc discussions on fisheries matters not directly related to the work of the Bay of Bengal project and are often consulted by cooperating agencies, national institutions, funding agencies, FAO offices and other fisheries projects.

#### B. PROJECT INPUTS

76. The inputs provided for the first year of operation have in monetary terms been utilized to about 80%. The commitments incurred amount to about 90% of the budget but for various delaying reasons some of them will not be utilized before the end of the year. Estimated expenditures under different headings are given in table 1.

77. All international project staff (table 2) as provided for in the project documents have been recruited during the year, save the Extension/Training Specialist. This recruitment has been intentionally delayed since the subject of Extension/Training covers a wide area and it was felt that more information on the actual needs would be desirable before the post is filled. The workshop on Extension Service Requirements, in particular, was seen as a forum in which the duties and qualifications of this specialist would crystallise. FAO is now searching for a suitable incumbent.

78. As a follow-up to the workshop on Training of Women Extension Workers it was felt that a Sociologist/Women Officer should be attached to the project with duties to ensure the highest possible integration of women in project activities in general. The officer would be further responsible for the planning and monitoring of specific activities for women's involvement and benefits in cooperation with technical expertise of the project and fisheries administrations. The post has, after endorsement by SIDA, been established for one year initially and is expected to be filled early 1980. The post is funded by extra project funds received as a result of changes in the exchange rate between Swedish kronor and US dollars.

79. Requests for associate experts have been made in respect of all disciplines covered by the international staff. At the time of reporting there are indications that three associate experts may be recruited in the near future in the disciplines of Socio-Economics (Netherlands), Fishing Technology (Sweden) and Naval Architecture (Norway). Associate experts are not funded by the project but by respective donor governments,

80. Requests and invitations for In-Service Training Awards (INSTA) which are fellowships for young professionals from developing countries have been issued to all the participating countries (except India, the host country, for which this does not apply). In spite of reminders and followup, no response has so far been received. As in the case of associate experts, INSTA fellows are not funded by the project but by a special FAO Trust Fund.

81. Delays in recruitment of staff have to certain extent, been compensated by the use of consultants (table 3) particularly in the field of Fishing Vessel Technology. Delays however, have also occurred in the location and recruitment of suitable consultants. Although project implementation has not yet been seriously impeded it is still a matter for concern and steps are being taken to streamline the procedures, both on the FAO side and that of the cooperating agencies, to facilitate smooth operation in the future. Staff of national institutions have been assigned to the project on deputation

basis (table 3). The experience has been very positive and wherever possible, this form of cooperation will be continued and hopefully expanded.

82. The recruitment of national staff has been nearly completed during the year. In addition to the posts provided in the project document, posts have been established for national officers in Bangladesh and Sri Lanka. The main duty of these officers is to provide day-to-day monitoring of project activities, facilitate the work of international staff and consultants and assist in administrative matters related to local expenditures, imports, cooperation agreements, etc. Details of the national staff are given in table 4.

83. Several agreements have been concluded with national organisations/institutions on a cooperation basis for implementation of activities. The experience to date is only positive and this particular feature of the project implementation might develop into one of the most important factors in achieving a sustained effect of the assistance provided by the project. Table 5 gives a list of the cooperation agreements entered into.

84. The major items of equipment, materials and supplies have, during the first year, been employed in the Madras office and for fishing activities in Bangladesh and Sri Lanka. A break-down is given in table 6. Significant quantities of fishing gear have been procured in India for use in Bangladesh, Sri Lanka and India itself.

85. Three workshops and one training course have been conducted during the year. Although all four activities are labelled training activities in the FAO terminology, the workshops have been more in the nature of consultation than of training. The number of participants from each participating country in each workshop/training course is given in table 7.

86. A few fellowships have been granted. Some of these are directly related to project activities like in Malaysia while others concern meetings and training courses sponsored by other organisations and projects. The details are given in table 8.

TABLE 1                    1979... BUDGET AND ESTIMATED EXPENDITURES - GCP/RAS/040/SWE

Codes	Object of expenditure	<u>Budget</u> *		<u>Estimated expenditures</u> **		<u>Balance</u>
		m/m	\$	m/m	\$	\$
-10	Personnel Services	82	395,900	76.5	423,031	(27, 131)
-20	Duty Travel		90,000		71,268	18,732
-30	Contractual Services		105,000		49,689	55,311
-40	General Operating Expenses		48,654		41,495	7,159
-50	Supplies and materials		35,000		42,562	( 7,562)
-60	Furniture and Equipment		115,000		102,420	12,480
-80	Fellowships, Grants, Contributions		100,000		37,714	62,286
-90	Project Servicing Costs		124,537		124,537	
			<u>1014,091</u>		<u>892,716</u>	<u>121,375</u>

\* As per Project Document

\*\* Commitments for 1979 as per FAO financial statement for month ending September 1979.

TABLE 2

1979.... INTERNATIONAL PROJECT PERSONNEL GCP/RAS/040/SWE

S. No.	Post	Name of Incumbent (Nationality)	Arrival		Man-months	
			Scheduled (month / year )	Actual	1979	Total
1.	Project Manager	L O Engvall (Sweden)	11/78	11/78	12	14
2.	Development Adviser	V L C Pietersz (Sri Lanka)	1/79	1/79	12	12
3.	Fishing Craft Specialist	R Ravikumar (India)	1/79	9/79	4	4
4.	Fishing Technologist	G Pajot (France)	1/79	1/79	12	12
5.	Mechanical/Marine Engineer		10/80			
6.	Fish Utilisation Specialist	M T Nathan (India)	1/79	2/79	11	11
7.	Extension/Training Specialist		6/79		-	-
8.	Fish Technologist		1/81	-	-	-
9.	Sociologist/Women Officer		1/80	-	-	-
10.	Associate Experts		-	-	-	-
11.	INSTA Fellows		-	-	-	-

TABLE 3

1979 ... CONSULTANTS - GCP/RAS/040/SWE

S. No.	Name	Nationality	Duration m/m	Field
1.	E Petersen	Norway	1	Fishing Technology/BGD
2.	O E Saevik	No rway	2½	Fishing Technology/BGD
3.	O Gulbrandsen	No rway	3½	Fishing C raft/IND, SRL
4.	H H Juliusson	Iceland	2	Fishing Technology/SRL
5.	W D Hartmann	Germany	1	Social Feasibility
6.	Ms I Ofstad	Norway	1½	Social Feasibility
7.	G Eddie	U.K.	2	Floating Units/BGD
8.	J Marjoribanks	U.K.	1	Marketing Course/IND
9.	Kamphol Adulavidhaya	Thailand	1½	Socio- Economic Survey/THA
10.	R Nicholson	U. K.	1	Marketing Course
11.	B Tiensonggrusmee		1 week	Coastal Aquaculture/MAL
12.	R G Hechanova	Philippines	2	Coastal Aquaculture/MAL

Contd. . . .

TABLE 3 contd

S. No.	Name	Nationality	Duration m/m	Field
<u>FAO HEADQUARTERS STAFF ON CONSULTANCY</u>				
1.	J Johnson		2	Fisheries Extension
2.	P Gurtner		1	Fishing Craft/IND
3.	Ms N D Hahn		½	Fisheries Extension - Women
4.	Ms CL Yap		½	Fisheries Extension - Women
5.	Ms C Cuerden		1	Library
6.	T Solberg		½	Fishing Craft
7.	E Kvaran		½	Fisheries Extension
8.	Ms I Bjorklund		½	Fisheries Extension - Women
9.	M Doeff		½	Fisheries Extension and Training
10.	H Cook		1	Coastal Aquaculture/BGD
11.	U Schmidt		1	Coastal Aquaculture/BGD
<u>NATIONAL STAFF ON DEPUTATION</u>				
1.	R Balasubramanian	India	½	Kattumaram Improvement
2.	T R Menon	India	3	Kattumaram Improvement
3.	V S Devara	India	1	Beach landing craft
4.	J Kurien	India	1	Social Feasibility

TABLE 41979 ... NATIONAL STAFF - GCP, RAS/040/SWE

S. No.	Post	Name of Incumbent	Date of joining month / year
1.	Administrative Officer	N Sivaraman	4/79
2.	Information Officer	S R Madhu	10/79
3.	Project Officer Sri Lanka	B W Perera	8/79
4.	Project Officer Bangladesh	A Kashem	11/79
5.	Senior Secretary	Ms S Scurville	4/79
6.	Secretary	Ms I Venkataraman	9/79
7.	Secretary	Ms M Paul	5/79
8.	Steno-typist	Ms A Watts	6/79
9.	Steno-typist	Ms P Gordon	11/79
10.	Receptionist	Ms M Stewart	10/79
11.	Driver	T P Shanmugam	4/79
12.	Driver	M Subramaniam	10/79

TABLE 5                      1979 ... COOPERATION AGREEMENTS WITH NATIONAL ORGANISATIONS/INSTITUTIONS    -  
GCP/RAS/040/SWE

S. No.	Activity	Name of Institution	Details of Activity
1.	SRL/BGD	ONIWI COMBINE	Design and construction of low-cost GRP twin-hull craft and demonstration of its use,
2.	SRL/BCD	CEY-NOR FOUNDATION	Construction and testing of 23 ft motorised cum sailing boat.
3.	SRL/IBM	CEY-NOR FOUNDATION	Supply of 18 ft GRP boat, inboard engine installation and fishing trials.
4.	SRL/DEF	Ceylon Fisheries Corpn.	Supply of bait fish for bottom set longline
5.	SRL/DEF	Institute of Fish Technology	- do -
6.	SRL/DEF	Lion Trawlers Industries Ltd.	Charter of boats for bottom set longlining
7.	SRL/ FGI	Fishermen in Sri Lanka	Testing and use of various improved fishing gears
8.	IND/KAT	Indian Institute of Technology	Determining quality of wood and wood preservation methods - Kattumaram improvement
9.	IND/BCD	Indian Institute of Technology	Testing of floatation materials for beach landing craft
10.	IND/BCD	Government and private boatyards	Construction of prototype beach craft - surf landing/fishing trials,

TABLE 5 contd.

S. No.	Activity	Name of Institution	Details of Activity
11.	IND/FFH	Fishermen's Coop. Orissa	Testing of insulated boxes for fish handling
12.	IND/TBT	Tamil Nadu Fisheries Development Corpn.	Use of boats for two boat trawling experiments
13.	BDG/FGI	Fishermen in Bangladesh	Testing of various fishing gears
14.	BGD/FMD	Bangladesh Fisheries Development Corpn.	Charter of boat for fishing trials
15.	BGD/FGI	CARITAS, Bangladesh	Supply of boat for testing and introducing suitable fishing gears
16.	BOB/BBM	Private consultant in India	Study of availability and cost of traditional boat building materials

TABLE 6

1979 ... EQUIPMENT, MATERIALS AND SUPPLIES/GCP/RAS/040/SWE

S. No.	Activity	Object of expenditure	Supplier (Country)
1	Office	vehicles (3), airconditioners, typewriters, calculators, intercom, refrigerator, vacuum cleaner	Hongkong, Sweden, Germany, India
2	SRL/DEF	line/net hauler, echo sounders, lines, hooks, etc,	Japan, USA, Italy, Sri Lanka
3.	SRL/FGI	gillnets, ropes, floats, etc,	Sri, Lanka, India, Japan
4.	BGD/FGI	gillnets, twine, ropes, floats, etc.	India, Japan
5	BGD/FMD	echo sounder, SSB radio, generator, nets, floats, ropes, etc,	Japan, India, UK
6.	IND/FFH	fish boxes	India

TABLE 7

## 1979 . . . WORKSHOPS AND TRAINING COURSE - GCP/RAS/040/SWE

Workshop/Training Course	Dates & Venue	No. of Participants				
		Bangladesh	India	Malaysia	Sri Lanka	Thailand
1. Training of Women Extension Workers (BOB/TWE)	23 - 27 April MADRAS	2	5	1	1	1
2. Social Feasibility in Small-Scale Fisheries Development (BOB/SOF)	03 - 08 September MADRAS	4	13	1	2	1
3. Extension Service Requirements (BOB/ESR)	08 - 13 October COLOMBO	1	4	-	7	2
4. Training Course for Fish Marketing Personnel (Tamil Nadu)	04 - 14 December MADRAS		20	-		
Total :		7	42	2	10	4

TABLE 8

1979 . . . FELLOWSHIPS - GCP/RAS/040/SWE

S. No.	Details of Course/ Fellowship	Number of Fellowships granted				
		Bangladesh	India	Malaysia	Sri Lanka	Thailand
1.	Extension Training Crash Course for Fishery Extension Instructors Bangkok (1 month)	1	-	1	1	-
2.	Study Tour Training in Indonesia Small holder fish pond project (2 weeks)	-	-	2	-	-
3.	Fresh Water Prawn Farming Workshop (2 months) in Hawaii			1		
Total :		1		4	1	

DEVELOPMENT OF SMALL SCALE FISHERIES IN THE BAY OF BENGAL

GCP/RAS/040/SWE

4th Advisory Committee Meeting 27 - 30 November 1979, Phuket, Thailand

AC 4/7

REVIEW OF SCOPE AND OBJECTIVES

The project was formulated during a long period of time with the active participation of representatives of the countries concerned. This resulted in a project document which is indeed very relevant to the needs of the small-scale fisheries in the region, But this also implies that the scope has become very wide, as is the geographical area. Consequently, there is a danger that the project, in spite of its size, will find its resources spread too thinly over many subjects and problem areas. It is therefore felt that the project should, with the guidance of the Advisory Committee, observe a priority rating of the different fields of activities given in the project document. Such a focussing of efforts will greatly facilitate the best use of the project and its services by the participating countries.

In considering the project orientation, not only the priorities of the Governments and the project's design and capacity but also similar work undertaken by other agencies, should be taken into account. This makes it necessary to continuously observe the priorities — a function of the Advisory Committee-and the recommendations will influence the type of input to be provided.

The experience of the first year of operation leads to the following observations in relation to the activity headings of the project documents:

Fishing Vessel Technology (1. 1) should continue to receive a very high priority since it is directly related to achievement of the ultimate purpose of the project.

Development of low-cost landing facilities (1. 2) is usually a very complex matter often requiring civil engineering expertise and costly investigations. It is therefore suggested that work under this item be limited to problems directly related to other work concerning development of beach craft and fish receiving centres (units).

Fishing Gear and Methods (1.3) should receive the same high priority rating as Fishing Vessel Technology,

Equipment Maintenance (1.4) The need for better facilities and practices for maintenance of engines and other mechanical equipment is recognised. It is however difficult to see how the project could in any significant degree bring about an improvement since the problems are mostly related to organisational aspects, availability of material and long term training of mechanics, which

are beyond the scope of the project. It is suggested that equipment maintenance be limited to necessary input in connection with other activities such as craft motorization.

There are, on the other hand, good prospects to achieve an impact in fisheries engineering as it relates to development of appropriate technology equipment for use on board vessels and ashore. Very often, expensive equipment components such as winches and haulers are imported while they could be produced cheaper within the countries concerned, and thereby generate employment and technology development.

Village fish receiving and distribution units (1. 5) should receive high priority with emphasis on suitable arrangements and facilities for collection, handling and preservation to improve quality standards and reduce waste rather than on distribution.

Floating fish receiving and distribution unit (1. 6) Priority should be established on the basis of the findings of the pre-feasibility mission.

Assistance with improved marketing (1.7) Marketing aspects will have to be considered in connection with all activities related to fish collection, handling and preservation and to product development. However, separate marketing activities with the inputs indicated in the project document are not believed to be meaningful and should be deleted or receive a low priority. Training courses like the one being conducted in December may be taken up under the heading Workshops/Training Courses.

Product and technology development (1. 8) should be assigned a high priority but activities should be undertaken as applied development efforts of direct and immediate interest to the small-scale fisheries communities and not as separate institutional research oriented projects.

Workshops/Training Courses (2.2) should, according to the project document, be held as the need emerges from related project activities. This is relevant to workshops of a consultative nature like the three workshops held in the first year. Where training courses are concerned it is believed that singular courses in a subject will not produce benefits commensurate with the costs. It is suggested that training activities should be of a programme nature consisting of a series of courses leading to specific targets as to level and number of trainees. The only field identified, which is not covered by the other subject matter headings, is stock assessment. Training related to extension services is referred to under that heading below.

Training for fishing technologists (2.3) should, as appropriate, be taken up under extension service training,

Extension Training Advisory Service (2.4) should receive high priority and also include other aspects of extension services such as organisation, methodology etc. A pre-requisite for sustained benefit of any extension input is a genuine substantiated interest on the part of the Governments concerned,

Strengthening Fishermen's Cooperative Organisations (3) In accordance with the recommendations of the Third Meeting it is suggested that this activity be deleted,

Information Service (4) is a necessary activity in relation to all activities and is therefore of high priority., The associated project RAS/77/044 is supplementary to these activities.

Development of Coastal Aquaculture (5) should receive high priority particularly in the countries bordering the eastern part of the Bay of Bengal.

Integration of women: The ultimate purpose of the project is directed towards fishermen families. It is therefore appropriate to devote more effort, than implied in the work plan of the Project Document, to family oriented activities. This should, wherever possible, lead to an increased women participation in project activities and small-scale fisheries in general. Specific activities for women, particularly concerning extension work, are envisaged but the integration of women should be a general feature applicable to many of the subject matter activities.

The above suggestions do not imply any significant reorientation but would help in focussing the work of the project. The objectives would not be affected except for (V) which relates to cooperatives and marketing. It is therefore suggested that this be deleted.

DEVELOPMENT OF SMALL-SCALE FISHERIES IN THE BAY OF BENGAL  
GCP/RAS/040/SWE

4th Advisory Committee Meeting 27-30 November 1979, Phuket, Thailand

WORK PROGRAMME

AC 4/8

Most of the activities started in the first year will be continued and some of them expanded. The detailed work plan is subject to the recommendations of this meeting and later discussions with the cooperating agencies concerned. The following outline of a work programme for 1980 is, as in the previous year, a preliminary framework of suitable activities matched to the likely capacity of the project.

a. Fishing Vessel Technology

Of the ongoing activities, highest priorities will be given to Kattumaram Improvement, Beach Craft Development in India and Sri Lanka and the Motorisation of Country Craft in Bangladesh. The latter is due to start at the beginning of the year. The activities concerning Reinforced Vulcanised Rubber Boats and the study of Traditional Boat Building Material are expected to be completed during the year,

New activities proposed are:

- i. Fishing boat design and prototype construction in Bangladesh.
- ii. Improvement of sailing rigs of traditional fishing craft; this activity would probably be concentrated in Sri Lanka and the south-east coast of India.
- iii. An analysis of the long-term effects of the increasing energy cost on small-scale fisheries would be made prior to physical work with improved sailing rigs.

b. Low Cost Landing Facilities

The future engagement in a Floating Fish Receiving and Distribution Unit in Bangladesh will be determined by the prefeasibility study presently in progress. No further specific activities are proposed but work may, if appropriate, be undertaken in connection with the development of beach landing craft in India and Sri Lanka.

c. Fishing Gear and Methods

The major items under this subject matter heading will be activities related to Fishing Gear Improvement in Bangladesh and Sri Lanka, Demersal Fishing in Sri Lanka and an activity in India which was not started in the previous year i. e. Two Boat Trawling. The activity

concerning Cottage Industry for Netmaking is expected to be finalised.

New activities are proposed for Fishing Gear Improvement in India wherever found feasible. These activities concern the testing of new or improved types of fishing gear to increase productivity or to reduce the costs of gear to the fishermen. The work is implemented by providing new gear for use in their normal commercial fishing operations to the fishermen who in turn supply information about catch, wear and tear, etc. to the project.

It is also proposed to expand the ad hoc advisory services related to fixed gear and equipment and to promote the manufacturing of the same in the countries concerned,

d. Fish Utilisation

The activities under this heading are in an early stage of implementation and are therefore expected to continue in 1980. They concern Fresh Fish Handling, Fish Drying Technology and Village Fish Receiving Unit. No specific new activities are proposed, but efforts will be made to introduce, as much as possible, testing of appropriate equipment and techniques, such as windmills for water pumps in the Village Fish Receiving Unit, solar dryers in the Fish Drying Technology activity or fish silage production in fisheries where the production cannot be absorbed by the existing processing or marketing systems.

In activities concerning fish utilisation, women play a significant role and there are good prospects for increasing the involvement and making their role more important. These aspects will therefore receive particular attention.

e. Extension Services

The activities under this heading undertaken in the previous year were the meeting on Training of Women Extension Workers and the Workshop on Extension Service Requirements. Several ideas and project proposals suitable for activities in the field of extension service came out of these meetings. Some proposals from India and Bangladesh related to in-service training of existing women extension workers, training of trainers as well as women leaders drawn from the fishing villages and the production of suitable extension and training materials. The relevant proposals from the workshop on Extension Service Requirements related to assistance for a training programme in marine fisheries for a newly recruited batch of extension officers in Orissa, design of marine extension service in West Bengal and a comprehensive long term programme for extension service staff as well as training of women extension workers for family-oriented extension work in the fishing villages in Sri Lanka.

New activities are therefore proposed as follows:

1. Technical extension training in Orissa,
2. Design of marine extension service in West Bengal.
3. Comprehensive extension training in Sri Lanka,
4. Establishment of women extension programmes in Bangladesh, India and Sri Lanka.

f. Workshops/Training Courses

Workshops and training courses for various activities are generally covered under those heads. A training course on boat-building, for example, could be covered by the heading "Fishing Vessel Technology". The heading "Workshops/Training Courses" therefore only includes subjects not covered under other activity headings.

A training programme is proposed for the field of Stock Assessment as related to coastal fisheries. The programme is still to be determined and the first exercise in the programme is the workshop to be held in Bangladesh in June; this was already endorsed by the committee in its third meeting. Subject to positive outcome, the fish marketing course being organised in Madras will be repeated in other states and countries of the region.

g. Coastal Aquaculture

The aquaculture demonstration project in Thailand will continue and will be supplemented by a component of woman-oriented activities.

Project activities in the field of Coastal Aquaculture are under preparation for Bangladesh and Malaysia and are expected to come into operation early in the year.

As in the case of fish utilisation, aquaculture offers opportunities for an accelerated integration of women in small-scale fisheries development and will receive particular attention in the design and implementation of the activities.

h. Information Base

The main work in the coming year will be to put into effect routines for information collection and dissemination. Several reports, working papers etc. have already been prepared or are in preparation and have to be effectively produced and distributed. It is envisaged that four main types of information material will be issued; a series of reports of major activities; working papers on technical activities or sub activities; information leaflets for different target groups such as fishermen, government officials, industry personnel etc. (Some of these leaflets, as appropriate, may be published in different languages of the region); and a series of newsletters

with news about the project and its work and other small-scale fisheries news from the participating countries, A further elaboration of the envisaged information system is given in Annexe 1.

1. Other matters

Reports and other results of the project will be made available at the FAO/IPFC Symposium on Small -Scale Fisheries Development and Management in Japan. The project will be represented at the meeting and may finance the participation of contributors of papers from the project area.

The project will also contribute to and participate in meetings arranged by FAO and other international and national organizations, which are of direct relevance to the purpose, scope, and objectives of the project. Management and supporting services will be provided to the FAO/UNDP project RAS/77/044. In this context close liaison will be maintained with other development agencies for promotion and funding of small-scale fisheries development in the project area. Subject to the concurrence of the cooperating agencies, information meetings with bilateral and international agencies are contemplated.

COLLECTION, DISSEMINATION AND TRANSFER OF INFORMATION

In many areas of the world, including those covered by the Bay of Bengal project, an informed awareness of small-scale fisheries, its significance and its problems, is low-not merely among the general public but even among leaders and decision-makers. This is partly because fisheries have often been a 'poor cousin' of agriculture. " The profession is looked upon as socially inferior, " says a senior fisheries official in the region. "Even at government level, support is token, not full-fledged. "

Fisheries have suffered benign neglect from the mass media - the press, radio and television - as well, partly because of the dearth of specialist writers in developing countries, Journalists here have occasionally dabbled in agriculture, but 'fisheries journalists' are a non-existent tribe.

An effective information system on small-scale fisheries should endeavour to change this situation. Ideally, it should

- i. promote a better awareness of small-scale fisheries among the lay public and a closer attention to its problems from the country's political and intellectual leadership.
- ii. ensure that technical papers, expert studies and official reports on small-scale fisheries reach the right people at the right time.
- iii. publicize socio-economic change or the lack of it in the fishing community, and its response to new ideas.
- iv. build a good library on small-scale fisheries which is a repository of appropriate literature.
- v. encourage and assist the print and audio-visual media in factual reporting and insightful analysis of small-scale fisheries problems.

The project's strategy for setting up an effective information system would have four elements.

- i. Disseminating technical information on the project's own activities to fisheries experts.
- ii. Disseminating non-technical information on the project's own activities to the mass media and to other selected groups in the project area.
- iii. Disseminating non-technical information on small-scale fisheries in general to selected groups in the project area.
- iv. Setting up a good library on small-scale fisheries.

### 2. 0. 1. Disseminating technical information

The Project has categorized its technical literature into (i) Project Reports (ii) Working Papers (iii) Miscellaneous Papers and (iv) Information Leaflets.

Project Reports are reports of completed activity undertaken by the project. We will try to ensure an attractive printing and binding for these reports.

Working Papers could be project proposals or descriptions, progress reports of particular activities undertaken by the BOB project, BOB consultants' papers on completion of their assignments, papers prepared by BOB Workshop participants.

In this case, quick dissemination of the working papers is vital, and the prime emphasis will be on speed rather than on excellence of production.

Miscellaneous Papers will be occasional papers submitted by BOB staff to workshops and conferences conducted by other organisations and non solicited papers submitted to the BOB project on subjects within its scope.

Information Leaflets would be both technical and non-technical (see item 2.0. 2). The technical ones may contain information and guidelines, etc. aimed at fishermen, extension officers, netmakers, statistical enumerators,

We are trying to build up lists of appropriate recipients for all the above categories. The first three categories of literature, Project Reports, Working Papers and Miscellaneous Papers, would be aimed at fisheries personnel - in governments, private industry, research bodies, FAO, colleges and universities. Leading technical libraries would also get copies.

### 2.0. 2. Disseminating non-technical information

Our plans for non-technical literature on the project include

- (a) An information leaflet on the project and possibly colour brochures in the future.
- (b) Information leaflets on completed project activity, such as demersal fishing in Sri Lanka or the Kattumarams of Madras, or fresh fish handling in Orissa,
- (c) Special news features on completed project activity for the press and for radio/television.
- (d) Contributions to leading international fisheries magazines.

The leaflets and brochures mentioned above would be visually strong, with pictures, illustrations and maps. Their purpose would be promotional; they would be aimed mainly at the non-fisheries elite: Ministers, top government officials, newspaper editors, radio and television personalities, sociologists, social workers. But they could also be sent to fisheries administrators, libraries and extension officers. We are preparing lists of recipients.

### 2.0.3. Disseminating non-technical information on small-scale fisheries in general

- (a) Information Catalysis: The project would try to draw the attention of the print and broadcast media to newsworthy stories concerning fisheries, and would provide information inputs wherever possible on request. It would thus encourage accurate reporting and analysis of fishermen's problems.
- (b) Newsletter: The project plans an occasional newsletter - perhaps a quarterly - on significant developments in small-scale fisheries, on the activities of fisherfolk, on socio-economic trends in the fishing community. It will distill findings from research reports and expert studies, it will also cover the Bay of Bengal project's activities.
- (c) Films: The project could consider commissioning/financing/assisting the production of documentary films on specific aspects of small-scale fisheries in the Bay of Bengal region.
- (d) Film Loans: Films on small-scale fisheries from FAO Rome's collection could be borrowed by the project and loaned to member-countries.

### 2.0.4. Library

A library on small-scale fisheries is an important element of the information system. The project's library in Madras, now being re-organized with the help of an FAO Library Consultant, will subscribe to, receive, record, catalogue and store worthwhile literature on small-scale fisheries: books, journals, brochures, leaflets, government reports, technical papers, expert surveys.

The project has initiated exchange and cooperation between its library and some other libraries in the region,

- (b) Photo morgue: A photo morgue on small-scale fisheries would be a part of the library. The project plans to acquire and commission photographs on various facets of small-scale fisheries. The cooperation of fisheries departments in the region will also be sought to build a morgue of attractive photographs.

- (c) Photo exhibition: A photo exhibition on small-scale fisheries is an interesting possibility for a future date.

DEVELOPMENT OF SMALL SCALE FISHERIES IN THE BAY OF BENGAL  
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COMPOSITION AND TERMS OF REFERENCE OF THE ADVISORY  
COMMITTEE

AC 4/9

The Programme for Development of Small-Scale Fisheries in the Bay of Bengal, GCP/RAS/040/SWE, is a regional programme in which Bangladesh, India, Malaysia, Sri Lanka and Thailand participate. The programme is funded by the Swedish International Development Authority (SIDA). The Food and Agriculture Organisation of the United Nations (FAO) is the executing agency and responsible for programme implementation in accordance with the plan of operation signed by FAO and the participating countries.

In order to facilitate an active participation by the governments and SIDA in the monitoring of the programme, an Advisory Committee has been established with the following organization and functions:

1. The Committee is composed of a representative of
  - i. each participating country
  - ii. SIDA
  - iii. any other agencies giving financial support to the programme
  - iv. FAO
2. The Committee will:
  - i. review progress and performance of the programme
  - ii. observe the scope and objectives of the programme and advise on priority needs and programme orientation
  - iii. examine the work programme and advise on desirable revisions
  - iv. discuss and advise on Government inputs and support in order to facilitate effective implementation and technical cooperation between the participating countries,
3. The Meetings of the Committee will be
  - i. held at least once a year
  - ii. held in the participating countries, and chaired on a rotational basis
  - iii. convened by the Secretariat
  - iv. documented in reports adopted by the Committee
4. The Programme Leader will attend the meetings of the Advisory Committee, and secretariat services will be provided by the Programme
5. The Committee may, as appropriate, establish working groups

PUBLICATIONS OF THE BAY OF BENGAL PROGRAMME (BOBP):

Development of Small-Scale Fisheries (GCP/RAS/040/SWE)

Reports (BOBP/REP/. ... )

1. Report of the First Meeting of the Advisory Committee, Colombo, Sri Lanka, 28-29 October 1976.  
(Published as Appendix 1 of IOFC/DEV/78/44.1. FAO, Rome, 1978)
2. Report of the Second Meeting of the Advisory Committee, Madras, India, 29-30 June 1977.  
(Published as Appendix 2 of IOFC/DEV/78/44.1. FAO, Rome, 1978)
3. Report of the Third Meeting of the Advisory Committee, Chittagong, Bangladesh, 7-10 November 1978. Colombo, Sri Lanka, 1978.
4. Role of Women in Small-Scale Fisheries in countries bordering the Bay of Bengal.
5. Report of the Workshop on Social Feasibility in Small-Scale Fisheries Development, Madras, India, 3-8 September 1979.
6. Report of the Workshop on Extension Service Requirements, Colombo, Sri Lanka, 8-13 October 1979.
7. Report of the Fourth Meeting of the Advisory Committee, Phuket, Thailand, 27-30 November 1979. Madras, February 1980.

Working Papers:

1. Investment reduction and increase in service life of Kattumaram Logs. Balan, R.
2. Inventory of Kattumarams and their fishing gear in Andhra Pradesh and Tamil Nadu, India.